REMARKS

Claims 1-31 and 33-50 are pending. Claim 32 has previously been cancelled without prejudice or disclaimer to the subject matter set forth therein. Claims 1-31 and 33-50 stand rejected. There are no claim amendments. Reconsideration of the outstanding rejections in the present application are requested based on the following remarks.[1]

REJECTION OF CLAIMS 1, 7, 11-20, 22-31, & 33-50 UNDER 35 U.S.C. § 102(e)

Claims 1, 7, 11-20, 22-31 and 33-50 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,850,531 to Rao *et al.* ("Rao"). *Office Action*, p. 3. This rejection is hereby respectfully traversed. Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. As stated in MPEP § 2131, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Rao does not disclose "A multiple port unit adapted for coupling one or more computers to multiple peripheral devices over a network, said multiple port unit comprising: plural network ports, each of said network ports being configured to couple the multiple port unit to a computer over a respective network link; plural communication serial ports, each of said communication serial ports being configured to couple the multiple port unit to a peripheral device; and a control unit to interrogate the network links and to communicatively couple said communication serial ports to a selected one of said network ports based on the interrogation of the network links, the

[1] As Applicant's remarks with respect to the Examiner's rejections are sufficient to overcome these rejections, Applicant's silence as to assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (*e.g.*, assertions regarding dependent claims, whether a reference constitutes prior art, whether references are legally combinable for obviousness purposes) is not a concession by Applicant that such assertions are accurate or such requirements have been met, and Applicant reserves the right to analyze and dispute such in the future.

control unit further determining whether it is time to interrogate the network links." as recited in claim 1 of the present application. (Emphasis added).

The Office Action asserts that column 5, lines 8-24 of Rao discloses "plural network ports, each of said network ports being configured to couple the multiple port unit to a computer over a respective network link." *Id.* This asserted section of Rao recites that:

> Each FM 10 may have associated application-specific daughter cards, referred to as personality modules (PMs) 12, for additional physical line interfaces or support hardware. In the preferred embodiment, there are one or two PMs associated with each FM. Exemplary PMs 12 include Ethernet switch PMs 12a, primary rate interface PMs 12b, digital modem server PMs 12c, and serial data interface PMs 12d. Together, the FMs 10 and PMs 12 allow an ISP to provide a wide range of services and support a wide range of applications, all within a single platform.
>
> The Ethernet switch PM 12a enables a LAN connection to a public network, such as the Internet. This module is typically used to connect server farms, intranets, and Web servers to the Internet. According to one embodiment of the invention, the Ethernet switch PM 12a provides twelve 10 Mb Ethernet ports and two 10/100 Mb auto-sensing Ethernet/fast Ethernet ports.

Rao, C. 5, ll. 8-24. Rao fails to disclose that the plural network ports are configured to couple the multiple port unit to a computer as required by claim 1 of the present application. Hence, Rao does not disclose each and every element recited in claim 1 of the present application.

The Office Action asserts that column 2, line 40-49 of Rao disclose a "control unit to interrogate the network links." *Office Action*, p. 3. This asserted section of Rao recites that:

> The switch may also include fault management features to guard against single points of failure within the switch. A fault tolerant application manager (FTAM) monitors system modules, and if one module goes down, the FTAM software in the remaining modules preferably recovers from the failure, re-routing connections to different resources or output ports. Preferably, the FTAM invokes automatic protection switching (APS) hardware and software for automatic recovery from both equipment faults and external link failures.

Rao, C. 2, ll. 40-49. This asserted section of Rao fails to disclose interrogation of the network links. The Office Action further asserts that column 8, line 53 - column 9, line 26 of Rao

discloses "to communicatively couple said communication serial ports to a selected one of said network ports based on the interrogation of the network links." *Office Action*, p. 3. This asserted section of Rao recites that:

> Management and monitoring of the chassis by the CMM 34 is done in conjunction with the FTAM 36 running in the chassis manager. An instance of the FTAM 36 also runs in each of the other cards in the chassis. Whereas the CMM 34 is responsible for the entire chassis, the FTAM 36 is preferably responsible for recognizing faults and acting on some of the faults that are local to the card. Among other things, FTAMs 36 provide local monitoring, fault detection, fault notification, fault isolation, and service restoration (wherever possible) for card failures and link/port failures.
>
> Application software components register with the FTAM 36 identifying events to be monitored. When a fault is detected, the FTAM 36 notifies all applications that have registered for that type of event. The FTAM 36 and the applications then take corrective action. For instance, a clock manager application may register with the FTAM 36 for selection of external clock sources on active links. A redundant port list application may register with the FTAM 36 for determining faulty links and switching over to active backup ports. IP applications may register with the FTAM 36 for updating forwarding tables with failed link/port entries.
>
> Each FTAM 36 detects a card failure via hello messages. Each FM 20 sends out a hello message at fixed time intervals over the cell bus 20. If a card does not send hello messages, the other cards in the system mark this card as being down. The FTAM 36 in each card then updates all tables impacted by the failure event. The primary SCM 14, upon detecting the card failure, issues a reset request over the management bus to the primary chassis to restart the defective card.
>
> Each FTAM 36 also preferably detects link/port failures. Link and port drivers constantly monitor the state of each link and port. If a change in state is detected, a link failure broadcast message is sent to the FTAM 36. The system's automatic protection switching (APS) hardware and software mechanisms allow automatic recovery from both equipment faults and external link failures. For example, each port on the primary rate interface (PRI) PM 12b (FIG. 1) has two connectors, a Port "1A" 13 connector and a Port "1B" 15 connector. If an internal fault is detected on Port "1A" 13, the system's APS mechanism automatically redirects WAN traffic through the Port "1B" 15 connector.

Rao, C. 8, l. 53 - C.9, l. 26. The Office Action also asserts this section for disclosing "the control unit further determining whether it is time to interrogate the network links." *Office Action*, p. 3.

Exemplary support for the control unit may be found, *inter alia*, in the original specification on page 9, lines 8-12 which recites that:

> If it is time to interrogate computers 72 and 74, the routine proceeds to step E where processor 16 causes a packet to be sent to the IP address corresponding to each of computers 72 and 74 over link L1. If a reply is received, the corresponding computer 72 or 74 is deemed to be "OK", i.e., operating properly. If no reply is received from one of the computers 72 or 74, that computer is deemed to be "bad", i.e., not operating properly.

Page 8, lines 7-13 of the specification recites that:

> Each of the multiple port units 101, 102, and 103 periodically interrogates computers 72 and 74 to ascertain their operating status and to switch the active computer if necessary. Also, multiple port units 101, 102, and 103 periodically switch between links L1 and L2 to test the integrity of both links. If either of links L1 or L2 fails, multiple port unit 10 will send an alarm to computer 72 and/or 74. Therefore the possibility of switching to a defective link is minimized.

Thus, in view of the specification and in accordance with the ordinary meaning of "interrogation", the control unit "interrogates" the network links by sending a packet "to the IP address corresponding to each of the computers 72 and 74..." In other words, a signal is sent and a response is expected.[2] The multiple port units also switches between links to test the integrity of the links, *e.g.*, L1 and L2. Thus, the links are interrogated by sending a packet to the corresponding computers.

In contrast, Rao discloses a FTAM which "is preferably responsible for recognizing faults and acting on some of the faults that are local to the card. Among other things, FTAMs 36 provide local monitoring, fault detection, fault notification, fault isolation, and service restoration (wherever possible) for card failures and link/port failures." *Rao*, C. 8, ll. 53-62. Thus, the FTAM is only monitoring the faults that are local to the card. In addition, the FTAM may send

[2] "interrogate" is defined as "transmit (a signal) for setting off an appropriate response, as in telecommunication." interrogate. Dictionary.com. *WordNet® 3.0*. Princeton University. http://dictionary.reference.com/browse/interrogate (accessed: September 18, 2008).

out "hello" messages using the cell bus. *Rao*, C. 9, ll. 8-14. Again, this is local to the card. In order to detect link/port failures, "link and port drivers constantly monitor the state of each link and port." *Rao*, C. 9, ll. 15-17. Thus, Rao does not interrogate the links but rather sends internal hello messages within the network switch and monitors the state of the links. Rao does not disclose a "control unit to interrogate the network links" as required by claim 1 of the present application. Hence, Rao fails to disclose each and every element recited in claim 1 of the present application.

Regarding independent claims 11, 22, 30, and 40, since these claims contain similar limitations as argued above with respect to independent claim 1, the same arguments apply to these independent claims.

For at least these reasons, independent claims 1, 11, 22, 30, and 40, as well as dependent claims 2-10, 12-21, 23-29, 31, 33-39, and 41-50, are patentable over Rao. Therefore, the undersigned representative will not address the arguments with respect to claims 2-7, 11-20, 22-31, and 33-50 and reserves the right to address these arguments at a later time. Accordingly, it is respectfully requested that the rejection of claims 1-7, 11-20, 22-31, and 33-50 under 35 U.S.C. §102(e) be reconsidered and withdrawn.

REJECTION OF CLAIM 21 UNDER 35 U.S.C. § 103(a)

Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rao in view of U.S. Patent 6,222,714 to Hoffman *et al.* ("Hoffman"). *Office Action*, p. 11. This rejection is traversed. Since claim 21 is dependent on allowable independent claim 11 and since Hoffman does not cure the deficiencies of Rao with respect to claim 11, dependent claim 21 is allowable as well. Therefore, the undersigned representative will not address the arguments with

respect to claim 21 and reserves the right to address these arguments at a later time. Withdrawal of the rejection of claim 21 is requested.

REJECTION OF CLAIMS 2-6 & 8-10 UNDER 35 U.S.C. § 103(a)

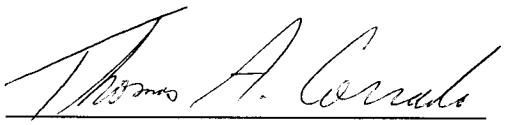
Claims 2-6 and 8-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rao in view of U.S. Patent 6,591,314 to Colbath. *Office Action*, p. 11. This rejection is traversed. Since claims 2-16 and 8-10 are dependent on allowable independent claim 1 and since Colbath does not cure the deficiencies of Rao with respect to claim 1, dependent claims 2-6 and 8-10 are allowable as well. Therefore, the undersigned representative will not address the arguments with respect to claims 2-6 and 8-10 and reserves the right to address these arguments at a later time. Withdrawal of the rejection of claims 2-6 and 8-10 is requested.

CONCLUSION

The foregoing is submitted as a full and complete Response to the Non-final Office Action mailed March 18, 2008, and early and favorable consideration of the claims is requested. If the Examiner believes any informalities remain in the application which may be corrected by Examiner's Amendment, or if there are any other issues which may be resolved by telephone interview, a telephone call to the undersigned attorney at (703)714-7448 is respectfully solicited.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 50-0206, and please credit any excess fees to such deposit account.

Respectfully submitted,



Dated: September 18, 2008

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